



Bud 2 PPG

UNITED STATES
NUCLEAR REGULATORY COMMISSION SECRETARIAT RECORD COPY
WASHINGTON, D. C. 20555
November 20, 1985

MEMORANDUM FOR: Commissioner Roberts
Commissioner Asselstine
Commissioner Bernthal
Commissioner Zech

FROM: Nunzio J. Palladino

SUBJECT: DRAFT 1986 POLICY AND PLANNING GUIDANCE (PPG)

Attached is the draft 1986 PPG for your review and for discussion at the Commission meeting scheduled for November 26, 1985.

I believe that the PPG document is one of the most important pieces of work performed by the Commission annually. While I realize that we are in a transition period to a five year planning process, I think that it is essential that you give careful consideration to this year's PPG.

I believe that the Commission review should concentrate on policy formulation and overall agency management direction. Thus, I suggest that we focus on the regulatory philosophy in Chapter II, the strategic goals enumerated in Chapter III, and the policies and planning guidance presented in Chapter IV. I regard the specific divisions into mission areas to be somewhat flexible.

I view your comments on the agency's philosophy, strategic goals, and policies to be of greatest importance. I suggest that we review these carefully so as to give clear direction to the staff.

Attachment: - 1N BP
As stated

cc w/attachment:
EDO
OGC
OPE
SECY ✓

8512060169 851120
PDR COMMS NRCC
CORRESPONDENCE PDR

11-20-85

DRAFT

Attach. to 11/20/85
Memo for Palladino

TABLE OF CONTENTS

	<u>Page</u>
I. INTRODUCTION	1
Purpose	1
Background	1
II. PHILOSOPHY OF REGULATION	3
Supporting Principles	4
III. STRATEGIC GOALS	7
Goal 1	7
Goal 2	8
Goal 3	9
Goal 4	9
Goal 5	9
IV. POLICIES AND PLANNING GUIDANCE	10
A. Oversee Operating Reactor Performance	12
B. Analyze Reactor Operational Experience	16
C. License Current and Future Reactor Designs	17
D. Predict the Extent to which Abnormal Operating Conditions will Degrade Safety	22
E. Resolve Reactor Safety Concerns	23
F. License and Monitor Materials Licensees/Fuel Cycle Facilities	28
G. Regulate High Level Waste	29
H. Regulate Low Level Waste	32
I. Perform Safeguards Regulatory Activities	32
J. Review Allegations and Conduct Investigations	35
K. Take Enforcement Actions	36
L. Adequately Manage and Support Technical Programs Conditions	38

DRAFT

I. INTRODUCTION

Purpose

The purposes of the Policy and Planning Guidance document are:

- to set forth the regulatory philosophy of the Nuclear Regulatory Commission and its supporting principles;
- to state the strategic goals and major policies of the Commission; and
- to provide guidance for the development of plans and programs, for the establishment of priorities, and for the allocation of resources.

The Commission believes that the publication, distribution, and careful individual review of this document will result in focusing efforts within the agency on the implementation of a regulatory process that is more effective and efficient in protecting the public health and safety, the common defense and security, and the environment.

Background

The Policy and Planning Guidance is organized into four major sections: Introduction; Philosophy of Regulation; Strategic Goals; and Policies and Planning Guidance. The policies and planning guidance are set forth in the context of twelve mission areas which cover the entire agency.

The intent of the philosophy section of the document is to establish the framework within which strategic goals, regulatory policies, plans, and priorities are developed. The intent of the succeeding section is to set forth the Commission's strategic goals. The policies in the last section flow from these strategic goals, and the planning guidance provides an expression of specific Commission priorities.

The Commission is planning to publish a Five Year Plan in 1986. That plan will identify the programs and resources needed to attain the Commission's strategic goals. The Commission intends the Five Year Plan to be a living document. It will be reviewed annually and revised to reflect changes in the regulatory environment and budget realities. This Policy and Planning Guidance will serve as the departure point for formulating the Five Year Plan.

II. PHILOSOPHY OF REGULATION

The Commission's fundamental mission is to regulate those who commercially use or produce nuclear material so that the public health and safety, the common defense and security, and the environment are protected. The Commission recognizes that its actions can affect the nation's energy mix and interdependent energy supply system of which nuclear energy is a significant part. The way the Commission carries out its fundamental mission must be consistent with and complementary to the determination of the Congress that the safe use of nuclear energy for peaceful purposes, particularly in the production of electricity, is a legitimate and important national goal. While the Commission recognizes that its functions do not include the promotion of nuclear energy, it also believes that Commission actions should reflect the broad objectives set forth by the Congress in the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended.

Although the Commission and the nuclear industry fulfill necessarily different roles and have different responsibilities, they share the responsibility for assuring that the public health and safety is adequately protected. In meeting this mutual responsibility, excellence should be the standard for performance. Excellence can be achieved by having a clear sense of purpose through honest assessment, by valid analysis and effective decisionmaking, by developing strong and vigilant management, and by continually searching for ways to do things better. The Commission urges industry to strive for such excellence and, in committing itself to the same standards, hopes to serve as an example as well as an overseer.

Supporting Principles

While safety regulation is its primary responsibility, the Commission recognizes that regulatory predictability and stability are extremely important to achieving overall safety and the statutory goal of supporting the expansion of the peaceful uses of nuclear energy. The Commission continues to pursue predictability and stability in its internal processes. New requirements will be imposed on existing licensees only in accordance with the Commission's backfit rule.

The Commission will attempt, through greater emphasis on defense-in-depth, to develop a less prescriptive regulatory process. Consistent with its goal to achieve stability in the licensing process, the NRC will also encourage the nuclear industry to develop standardized plant designs.

When NRC's comprehensive review of a qualified applicant's plans for a nuclear power plant has satisfied the Commission that it can be built and operated safely, the Commission has an obligation to license that plant. At the same time, NRC's review process should provide an accessible avenue for the expression of public concerns and an adequate response to those concerns.

The hearing process is to be used to resolve genuine, factual disputes that are material to the case. The right to participate carries with it the responsibility to do so in a business-like manner. While the Commission will not allow the deliberative process to be used as a mechanism for unnecessary

delay, it will continue to respect and consider differing viewpoints and constructive criticism.

The NRC has a responsibility to audit the construction and operation of a nuclear power plant and to thoroughly review material submitted in support of a license application and amendments. However, quality cannot be inspected into a plant. It is the responsibility of utility management to assure the quality of design, construction, recordkeeping, procedural adherence, and operation, and to assure the quality of service and equipment supplied by vendors. It is the responsibility of the NRC to see that the utilities perform this task.

The Commission has determined that the control of quality is closely correlated with management involvement and experience and therefore intends to ensure, early in the construction process, that the applicant has the required expertise at its disposal. The Commission will also assure that this involvement and expertise is retained throughout design, construction and plant operation. Requiring a more complete design prior to construction permit approval, mandating assistance from a more experienced organization, or other initiatives will be considered by the Commission in the event that an inexperienced utility applies for a license.

Regulatory oversight must be based on sound technical judgments and must include timely and decisive action. The regulatory process should be conducted in an atmosphere of cooperation and trust. Voluntary compliance

and industry initiatives to improve safety are to be encouraged. Nevertheless, enforcement is a necessary function of regulation. The Commission's enforcement policy and its implementation shall be firm and fair. The overall performance of a licensee will be a factor in considering enforcement action.

Public information and education enhance public awareness and can provide meaningful public participation in the regulatory process. The public should be informed of the Commission's activities and responsibilities in a factual, timely, and objective manner.

The Commission intends to shift its regulatory emphasis away from detailed, prescriptive requirements toward performance criteria. The severe accident policy, and the development of the revised safety goal and advanced reactor policy, are aimed at furtherance of this objective. The Commission believes that this approach will result in more effective regulation.

III. STRATEGIC GOALS

The Commission is establishing a set of strategic goals to be emphasized in NRC's regulatory activities. Each goal and various supporting objectives are enumerated below.

GOAL 1. To Assure Safe Operation of Licensed Facilities and Proper Construction of Facilities to be Licensed

- o Ensure that NRC and licensees apply operational experience
- o Ensure high standards of quality assurance
- o Ensure adequate training of licensee personnel
- o Achieve technical resolution of unresolved safety issues
- o Enforce applicable regulations
- o Investigate significant allegations expeditiously
- o Implement Commission policy on severe accidents
- o Conduct supporting confirmatory research
- o Allocate NRC resources to reflect the mix of operating facilities and facilities under construction

GOAL 2. To Improve Regulation of the Nuclear Industry

- c Control backfitting
- o Eliminate unwarranted regulatory delays and pursue hearing process efficiencies
- c Complete the reassessment of radioactive source terms and, if appropriate, implement revised source terms and change existing regulations
- c Rely on industry self-improvement, where justifiable
- o Encourage standardization and issue a revised standardization policy
- o Implement the safety goal policy
- o Prepare to license new types of power plants
- c Prepare for requests to reactivate deferred construction projects and to extend plant operating licenses
- c Support licensing reform legislation
- o Complete a comprehensive review of NRC regulations
- o Amend regulations to reduce prescriptive elements

GOAL 3. To Assure Adequate Protection of Nuclear Materials

- o Ensure safeguards measures are commensurate with threats
- o Ensure necessary controls are applied to exports of strategic nuclear material
- o Reduce overexposures of radiographers

GOAL 4. To Assure Radioactive Waste is Managed Safely

- o Review DOE's repository program in a timely fashion
- o Assist states to select sites and technology for low level waste
- o Clean up TMI-2 expeditiously

GOAL 5. To Manage Agency Resources More Effectively and Efficiently

- o Recognize value of NRC employees
- o Consolidate headquarters staff in one location
- o Improve management accountability tracking of planned accomplishments and schedules
- o Enhance information processing and distribution

IV. POLICIES AND PLANNING GUIDANCE

The NRC's major policies and planning guidance are organized under twelve general mission areas: (A) Oversee Operating Reactor Performance, (B) Analyze Reactor Operational Experience, (C) License Current and Future Reactor Designs, (D) Predict the Extent to Which Abnormal Operating Conditions Will Degrade Safety, (E) Resolve Reactor Safety Concerns, (F) License and Monitor Materials Licensees/Fuel Cycle Facilities, (G) Regulate High Level Waste, (H) Regulate Low Level Waste (I) Perform Safeguards Regulatory Activities, (J) Review Allegations and Conduct Investigations, (K) Take Enforcement Action, and (L) Adequately Manage and Support Technical Programs.

Within each mission area there is a policy section which establishes a general framework for shaping NRC plans and programs. Planning guidance is furnished in those areas where the Commission believes more detail is warranted to meet specific priorities or schedules, or where major assumptions are needed for program development. While the mission areas cover the entire agency, specific policies or planning guidance with respect to each and every activity within the NRC is not furnished, since it is not intended that this document be all-inclusive.

The Research Program is an essential element in many of the Agency's missions. As such the Commission believes it is important to highlight general guidance as it pertains to the Research Program. The research program should continue to provide the technical basis for rulemaking and regulatory decisions; to

support licensing and inspection activities; to assess the feasibility and effectiveness of safety improvements; and to increase our understanding of phenomena for which analytical methods are needed in regulatory activities.

There should be continued emphasis on using research results in the regulatory process and on obtaining results that are useful therein. The staff should be alert to research which shows that we ought to change our regulations. NRC regulations should be changed when research shows them to be either too stringent or not stringent enough to adequately protect the public health and safety.

NRC will continue to maintain a long-range research plan which is consistent with the agency's mandate and directed toward areas of importance to the licensing and inspection processes. The long-range research plan and the NRC's Five Year Plan will be consistent with each other. Research resources should be allocated to support a balanced program between research to reinforce or revise the current regulatory base and conceptual research for improved reactor safety, waste management, and other licensed activities. The major resource commitment for NRC research efforts will be light water reactor safety. The priority for research should be assigned in accordance with its safety significance.

Joint or coordinated research programs with industry groups, other government agencies and foreign groups should be pursued when possible, both to expand the technical breadth provided to projects and to maximize the benefit to be

derived from limited resources. Due consideration should be given to questions of conflict of interest when contemplating joint or coordinated research with industry.

A. OVERSEE OPERATING REACTOR PERFORMANCE

Policy

1. NRC's fundamental task is to assure that existing nuclear reactors and those coming on-line operate safely. Consequently, the highest priority will be given to assuring that reactors are adequately designed, built, and tested prior to operation and that operating facilities maintain adequate levels of protection of public health and safety.
2. The staff should carry out NRC regulatory activities in a way that recognizes that licensees have the primary responsibility for the safe design, construction, and operation of nuclear facilities.
3. The Commission intends to emphasize performance monitoring to ensure that potential operational problems are identified as early as practical and that action is taken before problems become critical.
4. NRC's goal is to encourage a high level of quality in reactor operations and maintenance. The NRC needs to better understand the causal factors leading to problems and to work to decrease the probability of repetition of past mistakes.

5. The Commission continues to believe in emergency backup systems, containment integrity and emergency planning as essential parts of the defense-in-depth philosophy. Emergency planning should be based on realistic assumptions.
6. The Commission continues to believe that radiation protection of workers should be considered when making engineering and operational decisions for nuclear facilities.
7. Expeditious and safe cleanup of the TMI-2 reactor is an important NRC priority. While direct responsibility for cleanup rests with the licensee, NRC will provide oversight and, if necessary, direction to ensure decontamination of the facility as well as safe and timely removal of radioactive products from the site.
8. The Commission places considerable importance on the need for the industry to properly train their staff in preventive, corrective, and all other areas of maintenance.

Planning Guidance

1. The staff's inspection of operating reactors should continue to focus on the plant operations of licensees, including maintenance activities. The analysis of operational data, risk-based analysis, systematic assessments of licensee performance and the monitoring of performance indicators will be used to help focus NRC activities, to allocate

agency resources, and to assess the licensee's management of its plant. Priority attention will be given to licensees with low performance ratings. The staff will provide information gained from performance appraisals to licensees. The staff will ensure that licensees implement appropriate action.

2. The staff should continue to closely monitor the first two years of operation of new plants coming on line, particularly those of licensees who have no prior experience with nuclear plants.
3. Licensees have the responsibility to assure that their vendors and equipment are adequately inspected. The staff should emphasize to licensees and industry that there is a need for their increased involvement in assuring the quality of vendor-supplied equipment and services. The staff should assure itself through its own selective inspection effort that both licensees and vendor organizations are meeting their responsibilities.
4. The Commission will consider alternate regulatory concepts which recognize the contributions of industry programs to the extent that such programs are effective and consistent with NRC regulatory responsibilities. The Commission supports such industry efforts as INFC's Training Accreditation Program Operating Plant Evaluations, the Nuclear Plant Reliability Data System, and fitness for duty and maintenance improvements.

5. The staff should develop performance indicators to monitor operating reactors.
6. The staff must continue to provide for the timely review and implementation of changes to power plant licenses necessary to assure safe operation, e.g., amendments, technical specification changes and approved new requirements; continue to provide timely responses to the public under 10 CFR Part 2.206; and continue to provide for replacement and recualification examinations to nuclear power plant personnel so that operations are not unnecessarily impacted.
7. NRC should continue to closely monitor its agreement with DOE which relates to the removal and disposition of solid nuclear wastes from the cleanup of TMI-2. The objective of NRC's monitoring is to help assure that the wastes are safely and expeditiously removed from the site. NRC should also assist DOE in development of plans for the safe and timely offsite disposition of the damaged core.
8. The staff should continue to monitor the effectiveness of the accreditation program by performing independent reviews of maintenance training programs.

B. ANALYZE REACTOR OPERATIONAL EXPERIENCE

Policy

1. The NRC and the industry must continue to learn the lessons that only experience can teach. Accordingly, a high priority should be given to the development of capabilities to foresee problems through monitoring performance and analysis of operational data.
2. Analysis of domestic and foreign operational data will be used to help identify potential accident precursors.
3. The NRC will continue to seek to understand the effects of aging and irradiation on materials and components in reactor containments.
4. Provisions for prompt and effective investigation of major incidents must be maintained with appropriate training of teams to carry out the incident investigation.

Planning Guidance

1. Efforts to collect, analyze, disseminate, and act upon operational data must continue to receive priority attention without hindering plant operation. The NRC will rapidly provide licensees with information gained from performance appraisals.

2. The staff should continue to interact closely with INPO and other industry organizations to assure the most efficient and effective utilization of NRC's resources in the treatment of operational data.
3. The staff will conduct research to identify measures which can be taken to correct deficiencies attributable to aging and irradiation and to reduce safety risks inherent to degraded equipment.
4. The staff will implement the program for investigation of significant operational events recently approved by the Commission.

C. LICENSE CURRENT AND FUTURE REACTOR DESIGNS

Policy

1. The NRC intends that its regulatory processes be efficient and cost effective. Actions should continue to be taken to eliminate unwarranted delay in reaching decisions consistent with not compromising safety, safeguards, or environmental requirements or the proper and effective functioning of the hearing process. The Commission reaffirms its statement of policy of May 1981 on licensing proceedings which urged licensing boards to take actions needed to assure the efficient conduct of hearings.
2. NRC's goal is to encourage a high level of quality in reactor design and construction. The NRC needs to better understand the causal factors

leading to problems and to decrease the probability that past mistakes will be repeated.

3. The Commission intends to make its requirements known for both maintaining plants (including documentation requirements) and reactivating projects whose construction and licensing have stopped.
4. The problems to be faced when a request for an operating license extension is received are complex and require advanced planning. The Commission intends to begin development of the policies and criteria to define requirements for operating license extensions to help assure that industry's efforts in this area are focused on the primary regulatory concerns.
5. The Commission's goal is the approval of essentially complete standard plant designs. There are advantages to the development and use of standardized nuclear steam supply system and balance of plant designs. Such designs can benefit public health and safety by concentrating the resources of designers, engineers and vendors on particular approaches, by stimulating standardized programs of construction practice and quality assurance, by improving the training of personnel and by fostering more effective maintenance and improved operation. The use of such designs can also permit more effective and efficient licensing and inspection processes. Therefore, the Commission endorses regulatory actions that will strongly encourage industry to pursue standardization in future reactor designs.

6. The NRC will maintain the capability to respond to innovative and advanced reactor designs that might be presented for Commission review. Advanced reactor concepts shall be pursued within the framework developed in the Advanced Reactor Policy Statement and consistent with programs adopted by the Executive Branch, the Congress, or a focused private sector effort alone or in combination with the government.

Planning Guidance

1. Consistent with maintaining adequate levels of protection and without meeting legal requirements for operating facilities, staff reviews and public hearings should be completed on a schedule that assures the licensing process will not be a critical path item which could unnecessarily delay reactor startup.
2. The staff will continue to improve those activities that affect the quality of design and construction, particularly with respect to the translation of applicants' design commitments in the licensing process into plant hardware, procedures, staffing and training. Inspection programs associated with design and construction should continue to be integrated to assure that applicants' commitments are carried out in the construction process.
3. The staff should carefully consider, on a plant-specific basis, the necessity for some reactor operators with commercial experience at every

plant. In addition, it should consider the competence and experience of the management and staff before licensing each facility.

4. In view of the number of plants that have been postponed in the midst of construction, the staff will consider the legal and technical ramifications should a utility desire to reactivate a project after construction and licensing have stopped. The staff should propose policy guidance and develop procedures and requirements for mothballing and for proceeding with such projects by the end of 1986. The NRC inspection approach for such plants should reflect lessons learned. Beginning in FY 1987, the staff should be prepared for a possible request to restart construction on deferred plants.
5. In view of industry initiatives to address plant life extensions, the staff should propose policy guidance and develop licensing criteria to define requirements for operating license extensions. The staff should work with industry to ensure that key regulatory issues are identified.
6. The staff should propose revisions to the Commission's 1978 Policy Statement on Standard Plants and associated regulations to reflect the Commission's severe accident policy.
7. The staff should prepare for Commission consideration proposed Commission actions which will encourage industry to proceed with standardization.

An option that should be considered is formal NRC certification of standard designs (including balance of plant) and limiting applications for a license to certified standard designs.

8. During 1986, the staff should develop revised procedures for the review and licensing of new standardized nuclear power plant designs and to review and preapprove potential plant sites by revising our licensing procedures as necessary.
9. Through the remainder of the 1980's, the NRC should continue to maintain its capability to review, in a timely manner, applications for standardized plants and preapproved sites.
10. The staff will develop draft guidelines on changes to general design criteria and to the regulations to accommodate advanced reactors.
11. Staff should evaluate and explore the safety characteristics of new reactor types as such new reactor concepts evolve and come before the Commission.

C. PREDICT THE EXTENT TO WHICH ABNORMAL OPERATING CONDITIONS WILL DEGRADE SAFETY

Policy

1. The NRC will develop and maintain an adequate understanding of how reactor safety systems and components behave under postulated accident conditions. The NRC will evaluate major reactor safety systems so that the agency can identify potential weaknesses and provide alternatives or identify necessary backups to prevent accidental releases of radioactivity. Revisions to regulations or licenses should be developed to implement any needed regulatory requirements.
2. The NRC will assess the ability of containment to prevent accidental releases under postulated accident conditions so that the public can be assured that, in the event of an accident, radioactivity is contained within the facility. In this connection, the severe accident research program must provide timely information in the Commission's decision-making process on severe accidents.

Planning Guidance

1. The staff should expeditiously carry out those activities necessary to implement the Commission's severe accident policy.

2. In its safety systems evaluation, including postulated accident sequences, the NRC will conduct research on complex operational and thermal-hydraulic transients.

E. RESOLVE REACTOR SAFETY CONCERNS

Policy

1. NRC must be sensitive to the large number of requirements imposed on licensees. Requirements imposed on the regulated industry by NRC are to provide a positive contribution to the public health and safety or common defense and security, not only individually, but also when the requirements are taken as a whole. Requirements proposed to achieve incremental reductions in risk should be evaluated on a cost-benefit basis, insofar as practicable. New requirements will be imposed on existing licensees only in accordance with the Commission's backfit rule. There should be no unnecessary regulatory burdens. NRC regulations should allow individual licensees the flexibility to select the most cost-effective ways to satisfy NRC safety objectives, particularly for plant specific requirements. In cases where there are conflicting priorities in establishing and implementing new requirements, priorities will be based on the expected safety-benefit potential and costs associated with the new requirement.
2. To the extent practicable, issues which affect numerous licensees should be addressed in the context of rulemaking or standard orders as opposed

to case-by-case review. Insofar as practical, an effort should be made to avoid requirements which would build in more differences among plants than already exist.

3. Where data permit, probabilistic risk assessment is a useful tool for assessing the reliability of safety systems and for weighing risks against one another. Quantitative risk assessment techniques will be used judiciously by the staff and the boards to estimate risks as an aid to decisionmaking.
4. Unresolved safety issues should be promptly pursued. Priorities for implementation should be established in light of the safety significance of the issue and all other requirements imposed on the licensee.
5. The Commission has decided to improve its characterization of radioactive source terms before proceeding with related changes to regulations. Changes to current regulatory policies will be considered if the reassessment of the radioactive source terms and their risk importance so warrants.
6. The Commission has developed preliminary safety goals and related safety guidance. These preliminary safety goals and quantitative design objectives will not be used as a basis for making regulatory decisions during the evaluation period.

Planning Guidance

1. The EDO has overall authority and responsibility for managing backfitting. The staff should diligently manage backfitting for reactors under construction or in operation in accordance with the backfit rule.
2. The Committee for Review of Generic Requirements (CRGR) shall continue to review and make recommendations to the EDO on proposed generic requirements for reactor licensees. The CRGR shall continue to assure that proposed requirements (a) contribute to the protection of public health and safety or common defense and security, and (b) provide for the utilization of both NRC and licensee resources in a manner which effectively and efficiently achieves protection of the public.
3. Existing regulatory requirements should be reviewed to see if some could be eliminated without compromising safety or safeguards or environmental protection. For those requirements that are necessary, effective measures should be taken to ensure that they are implemented in a timely manner.
4. The staff should continue its efforts to establish an integrated implementation schedule for new and existing requirements reflecting relative priorities for each power reactor licensee. Where practical, and where the degree of understanding and data permit, the results of cost-benefit analysis should be used as one tool for evaluating new

requirements. The schedules should reflect the importance of the requirement to safety or safeguards, as well as the licensee's ability to complete the necessary engineering, evaluation and design. Once compliance dates have been established, the Commission will vigorously enforce license requirements associated with such schedules.

5. The staff should continue to assure that licensees implement all existing and new requirements which are imposed and to verify licensee implementation as appropriate.
6. The Commission recognizes the value of foreign experience in helping NRC identify and evaluate possible approaches to resolving regulatory issues and changes to improve U.S. regulatory processes and requirements. The Staff should continue to maintain an understanding of regulatory practices of foreign countries with respect to subject areas of special interest.
7. Attention should be given to refining the use of probabilistic risk assessment techniques to implement Commission policy on safety goals, as directed by the Commission, and in other regulatory applications especially amenable to risk assessment. Whenever probabilistic risk assessment is used in the decision-making process, there must be clear statements of the scope and depth of the assessment, clear identification of the most significant assumptions, and a systematic evaluation of the most important uncertainties.

8. Attention should be given to developing an integrated program for the collection, analysis and distribution of data needed for risk assessment.
9. The staff should continue the efforts approved in the NRC Human Factors Program Plan. The staff should make effective use of available human factors data and take industry efforts (such as INPO and NUMARC) into account in developing NRC programs.
10. The radioactive source terms and their risk importance should be better characterized by a systematic analysis of accident sequences, containment performance and the release and transport of radioactivity. A reassessment of radioactive source terms should be completed in 1986. If supported by the reassessment, the staff should develop a revised, more realistic source term and draft modified regulations, as justified by the new source term and risk data.
11. In 1986, the staff will provide the Commission with recommendations on proposed safety goals resulting from the two-year evaluation period. The recommendations should discuss in detail the regulatory implications of the safety goal.
12. By the end of 1986, to the extent practical, the staff will issue for public comment draft technical resolutions for currently identified unresolved safety issues. The Staff should continue to review and approve the addition of new generic safety issues in accordance with current Commission policies, and given resource constraints, resolve the high priority issues first.

F. LICENSE AND MONITOR MATERIALS LICENSEES/FUEL CYCLE FACILITIES

Policy

1. Byproduct, source and special nuclear materials must receive regulatory attention commensurate with their potential hazards to the public and to the users of these materials. Efforts to achieve greater standardization of material licensing reviews and consistency in application of regulatory requirements should be continued.
2. The Commission intends to pursue regulatory efforts aimed at improving radiography safety.
3. The Commission considers the regulation of the transportation of nuclear and radioactive materials to be an important part of its responsibilities.

Planning Guidance

1. Applicable regulations should be reviewed and updated to provide the necessary degree of regulation with a focus on performance requirements.
2. Regulations to consolidate and streamline the safety requirements associated with medical use of byproduct materials and well-logging should be promulgated along with associated regulatory guidance, standard review plans and inspection procedures by the end of 1986.

3. Regulatory efforts to improve radiography safety, in particular through the establishment of performance standards, as well as more effective training and inspection programs, should be completed by July 1986. Rulemaking to improve safety should be coordinated through the ad hoc Radiography Steering Committee.
4. The staff shall continue development of regulations to implement the Environmental Protection Agency (EPA) mill tailings standards for groundwater protection. Efforts to develop alternate concentration limits methodology jointly with EPA should receive high priority.
5. The staff should assure that NRC responsibilities in regulating the transportation of special nuclear related and radioactive materials are coordinated with other Federal agencies to achieve an integrated Federal Program for protecting the public health and safety, common defense and security, and environment, while minimizing unnecessary impacts on the regulated industry.

G. REGULATE HIGH LEVEL WASTE

Policy

1. The NRC High Level Waste Management Program is critical to the success of an urgent national task. NRC will provide the necessary pre-licensing consultation, and licensing and regulatory oversight and guidance for

the Executive Branch's program as required by the Nuclear Waste Policy Act of 1982 (NWPA), the Atomic Energy Act, Energy Reorganization Act, the National Environmental Policy Act, and the Commission's regulations. NRC's programs, including the necessary research and development, will be directed to an effective and efficient discharge of its responsibilities based on the premise that, in the absence of unresolved safety concerns, the NRC regulatory program will not delay implementation of the Executive Branch's program as reflected in the Department of Energy (DOE) project decision schedule and mission plan. If it becomes clear that NRC cannot maintain its schedule due to the unavailability of resources or other factors, the staff will promptly inform the Commission so that the required notification of DOE and the Congress can be made.

2. The staff should continue to maintain close communications with DOE, the states and affected Indian tribes so that required activities and lead times are identified early in the planning process.
3. To the extent possible, and consistent with NRC's independent role, system development required to support programs to implement the NWPA should be performed by DOE. NRC will continue its technical program to support the development of licensing criteria and evaluation methods, and the early identification and resolution of technical and quality assurance or control issues.

Planning Guidance

1. The staff should review the existing and proposed regulations that are covered by areas addressed by the NWPA, and make conforming changes as necessary. The staff should formalize the procedures for documenting agreements between the NRC and DOE staffs on the resolution of technical issues that would otherwise be open issues during the license review.
2. The NWPA has established that nuclear utilities have the primary responsibility for interim storage of spent fuel, pending repository operation or availability of monitored retrievable storage. The NRC should review in a timely manner, consistent with safety and legal requirements, utility proposals for adding spent fuel storage capacity to assure that, in the absence of unresolved safety concerns, regulatory actions do not unnecessarily affect reactor operation. NRC must also be prepared to conduct licensing reviews specified by the NWPA for limited federal interim storage capacity of spent fuel which may be proposed by DOE. The NRC should continue to develop the basis for rulemaking that would, to the extent practicable, enable use of dry spent fuel storage casks without site-specific licensing reviews.
3. The staff should establish licensing requirements and be ready to review proposals for monitored retrievable storage facilities in the event the Congress authorizes the Department of Energy to proceed with such facilities.

4. The NRC will continue its research efforts to develop methods for repository and waste packaging performance assessment in support of the agency's high-level waste regulations and associated regulatory guides.
5. The staff should continue to coordinate with DOE in defining the requirements for a licensing information management system to be implemented by DOE to support a three year high level waste repository construction authorization review. The staff will identify its needs to DOE so that NRC will not develop a redundant system.

H. REGULATE LOW LEVEL WASTE

Policy

1. The NRC will continue to regulate low-level waste in accordance with its regulations and applicable law.

Planning Guidance

1. The staff shall monitor the activities associated with the implementation of the Low Level Radioactive Waste Policy Act and shall apprise the Commission of any problems requiring Commission action along with recommendations for each action.

2. The staff shall continue to develop the necessary technical guidance for applicants who may wish to pursue approaches other than shallow land burial for the disposal of low level waste.
3. The staff shall be prepared to review or assist Agreement States in the review of applications for low-level waste disposal facilities.

1. PERFORM SAFEGUARDS REGULATORY ACTIVITIES

Policy

1. Safeguards are an integral and ongoing element of the Commission's responsibility. Safeguards regulation should be conducted with the same defense-in-depth philosophy as safety regulation. Implementation of safeguards requirements shall not be contrary to the safe operation of a facility. Safety impacts of all new safeguards requirements shall be evaluated. Emphasis should be given to performance requirements rather than prescriptive requirements to allow licensees to select the most cost-effective ways to satisfy NRC requirements. Safeguards must be effective and commensurate with threat levels as approved by the Commission.
2. The proliferation of nuclear explosives technology poses a threat to the security interests of the United States. Hence, the NRC will carefully discharge its statutory licensing responsibilities to ensure that

necessary controls are applied to the import and export of nuclear materials, equipment, and facilities.

3. Steps should be taken expeditiously to convert, to the extent practicable, non-power reactors to the use of low-enriched uranium rather than highly-enriched uranium.

Planning Guidance

1. Evaluation of safeguards events will serve as a basis for regulatory change and response. This evaluation should include domestic events -- within both the defense and the regulated community -- and foreign events. However, the staff should not wait for significant events to occur before undertaking safeguards changes that are considered necessary. The staff should continue to evaluate threat levels based on intelligence information received from other government agencies as well as on experience.
2. The staff, in addition to assuring that safeguards plans are in place at operating facilities and for transportation, will continue its independent assessment that these implemented plans meet safeguards objectives and that safeguards regulations adequately support those objectives. An annual report shall be provided to the Commission detailing the results of the previous year's assessments. The report shall contain recommendations for continuing or discontinuing the assessment.

3. The staff will implement the rule converting non-power reactors to low enriched uranium fuel. The staff should expedite rulemaking to improve physical security measures at research reactors.
4. The NRC will continue to meet its commitments for the implementation of international safeguards at U.S. licensing facilities and to work with the Executive Branch as the U.S. pursues improvements in international safeguards.

J. REVIEW ALLEGATIONS AND CONDUCT INVESTIGATIONS

Policy

1. The Office of Investigations shall investigate significant allegations of wrongdoing by other than NRC employees and contractors as requested by the Commission, EDO, Regional Administrators, or on its own initiative.
2. Investigations should be thorough and should try to identify the root causes and reasons for violations. When initial collection of evidence indicates that the matter involves criminality, appropriate referrals will be made to the Department of Justice.

Planning Guidance

1. The Office of Investigations, in coordination with the EDO, should expeditiously develop appropriate threshold levels and the priorities for initiating and terminating investigations.

2. The EDO should provide technical support to the Office of Investigations in the conduct of investigations with due regard to their mutual priorities.
3. Consistent with available resources, investigations should be performed in a timely manner. Findings and conclusions on questions of intent and willfulness should be provided to cognizant offices. Findings of potential safety significance should be immediately referred to the cognizant office.
4. Close coordination should be maintained as appropriate between the Offices of Investigation, Inspection and Enforcement, Nuclear Reactor Regulation, Nuclear Material Safety and Safeguards, Analysis and Evaluation of Operational Data, and the Regional Offices. The results of investigations should be followed by appropriate action on the part of cognizant offices and the EDO.

K. TAKE ENFORCEMENT ACTIONS

Policy

1. NRC should maintain an effective enforcement program with uniform and timely application of enforcement policy throughout the regional offices. Enforcement policy will be firm but fair. The principal goals of NRC's enforcement program will be to assure safety through compliance with NRC safety and safeguards requirements.

2. NRC enforcement activities must be directed to assure that licensee corrective actions of deficiencies in performance are appropriate and that future compliance with requirements is ensured. For licensees that have a history of noncompliance, prompt and vigorous action will be taken. A licensee must not benefit by violating NRC regulations. Licensees who cannot achieve and maintain an adequate level of protection of the public health and safety, safeguards, and the environment will not be permitted to operate. Inspections on which enforcement activities are based should be thorough and should seek to identify the basic reasons why violations and deficiencies occurred.
3. Enforcement actions should encourage an aggressive approach by licensees to ensure adequate protection, and credit should be given for prompt reporting of deficiencies by licensees and for prompt, thorough, and voluntary corrective actions.

Planning Guidance

1. The Commission has established an Ad-Hoc Advisory Committee for Review of the Enforcement Policy composed of individuals with diverse backgrounds. The Commission will consider the Committee's recommendations for changes in the enforcement policy.

L. ADEQUATELY MANAGE AND SUPPORT TECHNICAL PROGRAMS

Policy

1. NRC's greatest resource is its employees.
2. The Commission needs to consolidate its staff and headquarters personnel in order to achieve more efficient and effective management of the Agency.
3. The NRC should assure greater commercial reactor operating expertise within the agency through training, hiring, and promotion practices and communication internally and with the industry.
4. Information technology should be used to more efficiently accomplish NRC's mission, if it is cost-effective.

Planning Guidance

1. NRC managers should give high priority to training and assigning employees in ways that make the most of actual and potential expertise, including creative affirmative action and upward mobility strategies that take full advantage of employee's skills and abilities. NRC managers should also give high priority to programs to provide agency personnel with needed training and experience.

2. The Commission will continue to pursue consolidation of its Washington, D.C. area operations in one location.
3. Mindful that NRC's recruitment efforts should avoid having adverse effects on industry programs to train and maintain experienced operators, the staff should continue the effort to employ individuals with commercial reactor operating experience.
4. The staff should develop a plan explaining how information technology will be used in meeting NRC's regulatory objectives. The plan should explain how telecommunications, document storage and retrieval, and data processing will be integrated.
5. The Executive Director for Operations (EDO) will assure that the necessary agency resources are applied to implement this document. The EDO will maintain a management system for the Commission to track major program accomplishments that support the Policy and Planning Guidance, and, when developed, the Five Year Plan.
6. In order to facilitate information flow, the Commission intends to meet with the staff on a regular basis in areas of particular interest; for example, to discuss progress in implementing specific regulatory programs, to receive reports on serious safety concerns, to explore activities in the regions, and to hear from various advisory panels.